



# BLACK ICE

Black ice is a phenomenon of areas that have rapidly changing, extreme temperatures in low-lying areas. It occurs when there is 'bleeding' and instability of asphalt that causes moisture to form on the pavement. Too much asphalt in the road mix causes the bleeding and instability which results in no exposed aggregate and reduced friction. When temperature drops, moisture on the pavement freezes to an extremely smooth surface (similar to block of ice) and looks black, like the road surface.

Black ice can also occur in shaded areas of the roadway and on bridges, even if the asphalt is stable. When the road is generally clear of ice and snow, you may suddenly come upon patches of unexpected ice. Melting snow running down from the upper side of a banked curve may freeze on the pavement as the sun sets. You may go from a perfectly clear pavement, round a curve at the base of a hill where the sun cannot reach the pavement, and hit black ice.

Since decks of bridges cool much more rapidly than other road surfaces, moisture often condenses on them and freezes quickly into thin sheets of ice when the temperature drops.

An alert and knowledgeable driver is protection against the 'black ice' phenomenon. An alert driver knows about and looks out for 'black ice'. A good driving rule is to SLOW DOWN before you come to bridges and places where the road is in the shade. Stay off the roadways during adverse weather conditions if at all possible. If you have to drive, drive with extreme caution.

